

CLAIMS

1. A golf club head, comprising:

2 a body having a front, striking face, a rear face, an upper face and a lower face; and

4 a sole plate secured across the lower face of the body, the sole plate being of glass fiber reinforced plastic material.

2. The club head as claimed in claim 1, wherein the sole plate is of glass fiber reinforced polyphenylene sulfide (PPS).

3. The club head as claimed in claim 2, wherein the glass fiber reinforced PPS has an additive of polytetrafluoroethylene (PTFE).

4. The club head as claimed in claim 3, wherein the PTFE content is 1% to 20% by weight.

5. The club head as claimed in claim 2, wherein the glass fiber content of the fiber reinforced PPS is in the range from 5% to 50% by weight.

6. The club head as claimed in claim 5, wherein the glass fiber content is in the range from 30% to 50% by weight.

7. The club head as claimed in claim 1, wherein the sole plate has an inner face and an outer face, and at least two spaced strengthening ribs are provided across the inner face.

8. The club head as claimed in claim 1, wherein the sole plate is of injection molded, fiber reinforced plastic material.

4 9. The club head as claimed in claim 1, wherein the lower face of the
body has a peripheral rim and an opening, the sole plate having a rim for
6 securing around the peripheral rim of the body, and an adhesive bonding
layer is provided between the peripheral rim of the body and sole plate to
secure the sole plate to the body.

2 10. The club head as claimed in claim 1, wherein the body is of injection
molded, ceramic composite material and the adhesive bonding layer is of
epoxy material.

2 11. The club head as claimed in claim 1, wherein the lower face of the
body has a first set of spaced, mating formations and the sole plate has an
inner face having a second set of corresponding formations for mating
4 engagement with the first set of mating formations on the lower face of the
body.

2 12. The club head as claimed in claim 11, wherein the first set of mating
formations comprises a plurality of bores and the second set of mating
formations comprises a plurality of posts projecting from the inner face of
4 the sole plate for mating engagement in said bores.

2 13. A method of making a golf club head, comprising the steps of:
injection molding a body of predetermined shape from a selected
ceramic composite material, the body having a front, striking face, a rear
4 face, an upper face and a lower face;
injection molding a sole plate of predetermined shape matching that
6 of the lower face of the body from a glass fiber reinforced plastic material;
and
8 bonding the sole plate to the lower face of the body with an adhesive.

10 14. The method as claimed in claim 13, wherein the sole plate is formed from a glass fiber reinforced PPS material.

2 15. The method as claimed in claim 14, wherein the glass fiber reinforced PPS material includes a PTFE additive.

2 16. The method as claimed in claim 15, wherein the additive content is in the range from 1 to 20 weight percent.

2 17. The method as claimed in claim 13, wherein the lower face of the body is formed with a peripheral rim and the sole plate is formed with a matching peripheral rim for bonding to the peripheral rim of the body lower face, and each peripheral rim is roughened prior to application of the adhesive.

4